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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/896,254	06/29/2001	Joseph L. Hellerstein	YOR920010334US1	9174
<div>7590 08/21/2007 RYAN, MASON &amp; LEWIS, LLP 90 Forest Avenue Locust Valley, NY 11560</div>			<div>EXAMINER NGUYEN, NGA B</div>	
			<div>ART UNIT 3692</div>	<div>PAPER NUMBER</div>
			<div>MAIL DATE 08/21/2007</div>	<div>DELIVERY MODE PAPER</div>

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/896,254	<b>Applicant(s)</b> HELLERSTEIN ET AL.	
	<b>Examiner</b> Nga B. Nguyen	<b>Art Unit</b> 3692	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 May 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This Office Action is the answer to the Amendment filed on May 31, 2007, which paper has been placed of record in the file.
2. Claims 1-39 are pending in this application.

### *Response to Arguments/Amendment*

3. Applicant's arguments with respect to claims 1-39 have been considered but are not persuasive.

In response to the applicant's arguments that Chaar (US Patent 6,857,020) fails to disclose "an agent module located in a distributed element and operative to measure the operation of that distributed element in terms of business metrics based on the electronic contract and then to execute a control command on the distributed element based on a financial optimization, the financial optimization based at least in part on the measured business metrics", examiner disagrees. Examiner submits that Chaar discloses in column 5, line 45 through column 6, line 65, SLA manager comprises one Cross-SLA Event Manager (CSEM), one SLA Management Object (SMO), **every SMO determines and executes** service management actions, the actions can be performed by **one or more service management agents**. Thus, **SMO is an agent module** located in **SLA manager (a distributed element)** measures the operation of that distributed element in terms of business metrics based on the electronic contract. Moreover, the CSEM handles resource allocation requests **submitted by SMO** and optimizes the allocation of available computing and people resources based upon the

provider's SLA management objectives for all of the established SLA contracts.

Therefore, Chaar does disclose "an agent module located in a distributed element and operative to measure the operation of that distributed element in terms of business metrics based on the electronic contract and then to execute a control command on the distributed element based on a financial optimization, the financial optimization based at least in part on the measured business metrics."

For the reason set forth above, examiner decides to maintain Chaar's reference for rejection (see details below) and make this Office action FINAL.

4. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-39 are rejected under 35 U.S.C. 102(e) as being anticipated by Chaar et al (hereinafter Chaar), U.S. Patent No. 6,857,020.

Regarding to claim 1, Chaar discloses apparatus for use in managing a service level associated with resources in a distributed information technology (IT) system based on financial terms, the apparatus comprising:

at least one processor operative to: (i) maintain an electronic contract that contains information pertaining to descriptions of one or more business transactions in IT terms, financial implications of one or more business transaction service levels, and reporting to be performed in one or more financial terms; and (ii) measure at least one service level of at least one element of the IT system in terms of one or more business metrics based on the electronic contract and based at least in part on input received from at least one agent module located in the at least one distributed element (column 8, lines 20, the service access controllers, the SLA-specified service-level monitors; column 5, line 45-column 6, line 33, SLA manager comprises one Cross-SLA Event Manager (CSEM), one SLA Management Object (SMO), **every SMO determines and executes** service management actions, the actions can be performed by **one or more service management agents**. Thus, **SMO is an agent module** located in **SLA manager (a distributed element)** measures the operation of that distributed element in terms of

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business metrics based on the electronic contract.); (iii) determine at least one financial optimization based at least in part on the measured at least one service level of at least one element of the IT system and base at least in part on the electronic contract (column 6, lines 48-65, the CSEM handles resource allocation requests **submitted by SMO** and optimizes the allocation of available computing and people resources based upon the provider's SLA management objectives for all of the established SLA contracts); (iv) issue at least one control command based on the at least one financial optimization, the command to be executed on the at least one disturbed element by the at least one agent module located in the at least one distributed element (column 8, lines 30-40, the SLA manager determined and executes service management action plans based upon the terms and conditions specified in the established e-business SLA contract); and

memory, operatively coupled to the at least one processor, for storing at least one of the electronic contract and results of the measurement operation (column 7, lines 49-50, establishing e-business SLA contract).

Regarding to claim 2, Chaar further discloses wherein the measuring operation comprises monitoring one or more IT parameters and evaluating results in terms of the one or more business metrics (column 6, lines 5-15).

Regarding to claim 3, Chaar further discloses wherein the evaluating operation is performed in real time or at a subsequent time (column 8, lines 15-20).

Regarding to claim 4, Chaar further discloses wherein the measuring operation comprises accumulating a historical collection of IT data and evaluating results in terms of the one or more business metrics (column 10, lines 3-14).

Regarding to claim 5, Chaar further discloses wherein the measuring operation comprises collecting measurement data from one or more sources, combining the collected measurement data, and interpreting the collected measurement data in terms of the one or more business metrics (column 9, lines 40-60).

Regarding to claim 6, Chaar further discloses wherein the measurement operation comprises monitoring hardware characteristics of the IT system (column 11, lines 1-10).

Regarding to claim 7, Chaar further discloses wherein the hardware characteristics comprise at least one of temperature and power consumption (column 6, lines 5-15).

Regarding to claims 8-9, Chaar further discloses wherein the measurement operation comprises monitoring software characteristics of the IT system, wherein the software characteristics comprise at least one of bandwidth usage, availability, response time, and latency (column 6, lines 5-15).

Regarding to claim 10, Chaar further discloses wherein the IT system comprises a collection of hardware and software intended to store or deliver data in a digital form (column 11, lines 1-10).

Regarding to claim 11, Chaar further discloses wherein the one or more business metrics comprise a measurement that directly measures the performance of a business (column 10, lines 30-35).

Regarding to claim 12, Chaar further discloses wherein the measurement comprises at least one of an operational cost, customer satisfaction, and relative industry performance (column 10, lines 10-35).

Regarding to claims 13-14, Chaar further discloses wherein the one or more business metrics are converted to one or more financial equivalents, wherein the one or more financial equivalents comprises at least one of a cost of each lost connection, a cost per second of down time, and a relationship between revenue and network latency (column 11, lines 18-23).

Regarding to claim 15, Chaar further discloses wherein results of the one or more business metrics are used to set IT parameters (column 11, lines 23-35).

Regarding to claim 16, Chaar further discloses wherein the one or more business metrics are reported to one or more parties (column 7, lines 10-35).

Regarding to claim 17, Chaar further discloses wherein the one or more business metrics are aggregated so as to obscure details reported to a third party (column 7, lines 10-35).

Regarding to claim 18, Chaar further discloses wherein reporting is performed in financial terms based on the electronic contract (column 11, lines 23-35).

Regarding to claim 19, Chaar further discloses wherein enactment is performed based on financial optimizations using the electronic contract (column 11, lines 23-35).



Regarding to claim 20, Chaar further discloses wherein the one or more business metrics to monitor are inferred from the electronic contract (column 11, lines 23-35).

Regarding to claim 21, Chaar discloses computer-based apparatus for use in managing a service level associated with resources in a distributed information technology (IT) system based on financial terms, the apparatus comprising:

an electronic contract manager module operative to maintain an electronic contract that contains information pertaining to descriptions of one or more business transactions in IT terms, financial implications of one or more business transaction service levels, and reporting to be performed in one or more financial terms and to determine at least one financial optimization based at least part on the measured at least one service level of at least one element of the IT system and based at least in part on the electronic contract(column 5, line 45 through column 6, line 65, SLA manager comprises one Cross-SLA Event Manager (CSEM), one SLA Management Object (SMO), **every SMO determines and executes** service management actions, the actions can be performed by **one or more service management agents**. Thus, **SMO is an agent module** located in **SLA manager (a distributed element)** measures the operation of that distributed element in terms of business metrics based on the electronic contract. Moreover, the CSEM handles resource allocation requests **submitted by SMO** and optimizes the allocation of available computing and people resources based upon the provider's SLA management objectives for all of the established SLA contracts.); and

one or more electronic contract agent modules, operatively coupled to the manager module located in one or more elements of the IT system being monitored, operative to measure at least one service level of at least one element of the IT system in terms of one or more business metrics based on the electronic contract and to execute at least one control command based at least in part on at least on the at least one distributed element (column 8, lines 30-40, the SLA manager determined and executes service management action plans based upon the terms and conditions specified in the established e-business SLA contract).

Regarding to claim 22, Chaar further discloses an electronic contract authoring system, operatively coupled to the manager module, operative to construct one or more electronic contracts that contain information pertaining to descriptions of one or more business transactions in IT terms, financial implications of one or more business transaction service levels, and reporting to be performed in the one or more financial terms (column 10, lines 48-60).

Regarding to claim 23, Chaar further discloses wherein the manager module is further operative to: (i) identify one or more business transactions; (ii) compute one or more transaction service levels; and (iii) compute one or more business metrics based on the one or more service levels; and (iv) reporting results associated with the one or more business metrics (column 8, lines 30-40).

Regarding to claim 24, Chaar further discloses wherein the manager module is further operative to: (i) identify one or more business transactions; (ii) forecast the one or more transactions over an enactment interval; (iii) predict performance and

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determine optimizations based on financial criteria; and (iv) initiate actions based on the predicted performance and the determined optimizations (column 14, lines 45-65).

Claims 25-39 contain similar limitations found in claims 1-20 above, therefore, are rejected by the same rationale.

### ***Conclusion***

7. Claims **1-39** are rejected.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Nga B. Nguyen whose telephone number is (571) 272-6796. The examiner can normally be reached on Monday-Thursday from 9:00AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Kambiz Abdi, can be reached on (571) 272-6702.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-3600.

9. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

C/o Technology Center 3600

Washington, DC 20231

Or faxed to:

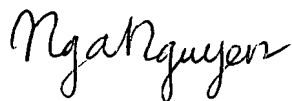
(571) 273-8300 (for formal communication intended for entry),

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or

(571) 273-0325 (for informal or draft communication, please label  
"PROPOSED" or "DRAFT").

Hand-delivered responses should be brought to Knox building, 501 Dulany  
Street, Alexandria, VA, First Floor (Receptionist).



NGA NGUYEN  
PRIMARY EXAMINER

August 15, 2007